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Research Article

**WEIGHT LOSS ASSESSMENT EXPANDED OVER TEN YEARS'
EXPERIENCE CARRIED OUT ON MORBIDLY AND
SEVERELY OBESE PATIENTS**¹Dr. Zain Raza Khan, ²Dr. Somia Shoukat, ³Dr Ammad Amjad¹Nishtar Medical University, Multan²Sahiwal Medical College Sahiwal³Shalamar Hospital, Lahore

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Abstract:

Objective: To observe that Ten-Year Weight Loss Evaluation after Adjustable Gastric Banding in Severely and Morbidly Obese Patients

Place and Time of study: Services hospital, Lahore in November 2018.

Methodology: Flexible gastric banding is a careful system utilized in France for restoring heftiness. It is a noteworthy issue of social insurance frameworks in occidental nations. We assessed the long haul aftereffects of this strategy on overabundance weight reduction (EWL) in a unicenter review examine. There are not many investigations announcing the exhibition of this system in the long haul (over 10 years). In our examination, there were 90 female and 7 male patients. The mean age was 35 ± 9 years. Complete ninety-seven patients experiencing a customizable gastric banding method in our middle from 1999 to 2003 were incorporated. The pre-employable mean Body Mass Index (BMI) was 43.02 ± 5.7 kg/m². The rate of banding evacuation was 35%, development – 73%. After medical procedure, the BMI diminished logically to achieve its insignificant incentive at 22 months, with a mean of 32.96 ± 7.4 kg/m². At 10 years, the BMI builds continuously to accomplish a mean of 36.75 ± 7.42 kg/m². Better determination criteria and quick strategy changes (revisional systems) in instances of deficient weight reduction could improve the exhibition of this careful procedure. Our examination couldn't distinguish a factor that had the option to foresee achievement or disappointment.

Keywords: Long-term follow-up; Excess weight loss; Gastric banding.

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INTRODUCTION:

The procedure of movable gastric banding was first depicted by Kuzmak et al in 2013 [4]. This is a prohibitive laparoscopic procedure, decreasing the volume of utilitarian stomach. It has been polished Services Hospital since 2016. Three primary careful strategies are rehearsed in France – movable gastric banding (AGB), sleeve-gastrectomy and gastric detour. In 2012, 33.2 % of grown-ups in France were overweight ($25 \leq \text{BMI} < 30 \text{ kg/m}^2$) and 15% were stout ($\text{BMI} \geq 30 \text{ kg/m}^2$) [1]. Corpulence is legitimately in charge of 7 to 41 % of malignancy cases, 44 % of diabetes cases and of one-fifth of myocardial dead tissue cases [2]. Therapeutic treatment of heftiness isn't powerful in long haul studies [3]. The essential endpoint in our examination was an abundance weight reduction (EWL) assessment at 10 years after the AGB. We dissected these information to propose "measures to take" in instances of disappointment. Most of studies assessing the consequences of this method were constrained by a brief time of study – 3 to 5 years. The illustration of AGB technique is appeared in figure 1.

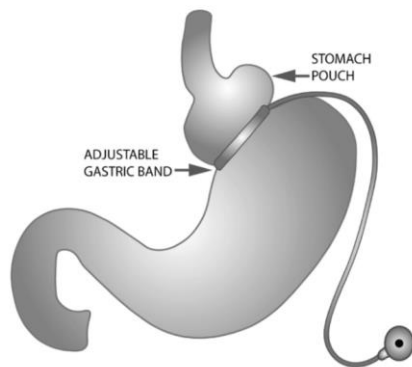


Figure 1: AGB procedure schema.

MATERIALS AND METHODS:

The incorporation criteria were HAS (High Health Authority) bariatric medical procedure indications – tolerant with $35 < \text{BMI} < 40 \text{ kg/m}^2$ and comorbidities or patients with $\text{BMI} > 40 \text{ kg/m}^2$ without comorbidities. This information was gathered reflectively either by counseling an individual document with an ongoing meeting in an out-persistent office or by phone. A complete number of 97 patients experiencing an AGB method in our middle from 2014 to 2018 (first experience) were incorporated into this investigation. The R free programming (R Project for Statistical Computing)

was utilized for the measurable investigation. The Kaplan-Meier strategy was utilized to speak to time-to-occasion data (AGB evacuation), and a dissipate plot was utilized to speak to BMI advancement. The outcomes were introduced as the mean \pm standard deviation. Univariate examinations were performed to distinguish the prescient variables of accomplishment and of AGB expulsion.

RESULTS:

In this review associate examination, the number of males and females were seven and ninety respectively. Twenty-six patients were lost from the study (73% of development, equivalent to other long haul studies [8]). Mean introductory weight record of patients was $43.02 \pm 5.7 \text{ kg/m}^2$. Their mean age was 35 ± 9 years. The mean overview time was 82 ± 49 months. At 10 years, the gastric band was evacuated in 34 patients (35%, similar to other studies [6-7]), as appeared in figure 2. Prior to the medical procedure, 27 % of patients have been treated for the blood vessel hypertension. Data about others comorbidities (type II diabetes, rest apnea, osteoarthritis) was not gathered methodically. Age, sex, tallness, weight and introductory BMI were tried in univariate investigations to distinguish the variables of accomplishment ($\text{EWL} > \text{half}$) or of band evacuation. We assessed the entire companion of patients, incorporating those with over 10 years of reconnaissance, those with over 5 years and those with over 2 years of observation. We determined Fisher or chi-2 test for every factor. At that point a strategic relapse examination was performed. We additionally investigated the impact of time in calculated relapse. We didn't perform multivariate investigation as there was no factually unique outcome ($p > 0.05$) for any factor. The underlying, insignificant and last BMI for all patients are spoken to in figure 3. This disperse plot with a smooth bend fitted by Loess portrays the inclination after medical procedure, where the BMI diminishes at first to accomplish at least $32.96 \pm 7.4 \text{ kg/m}^2$, comparing to a mean of $48 \pm 24\%$ of EWL at $22 + 21$ months. Afterward, we watched a dynamic BMI increment to achieve a mean of $36.75 \pm 7.42 \text{ kg/m}^2$, which compared to $32 \pm 24\%$ of EWL at 10 years. Toward the finish of this period, 22% (8/37) of patients who were all the while taking an interest in the review had a decent outcome - $\text{EWL} > \text{half}$ as indicated by the criteria of Reinhold [9]; 38% (14/37) had a halfway outcome - $25\% < \text{EWL} < \text{half}$; and 40% showed disappointment – $\text{EWL} < 25\%$. The re-intercession rate, with a wide range of medical

procedure included, was 58% (56 of 97 patients) toward the finish of the time of the overview.

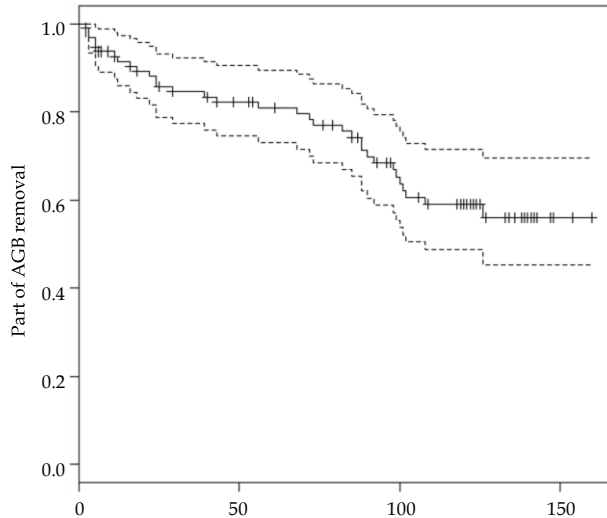


Figure 2: Incidence of AGB removal. Solid line represents the KaplanMeier estimates, and dashed lines represent 95% confidence intervals.

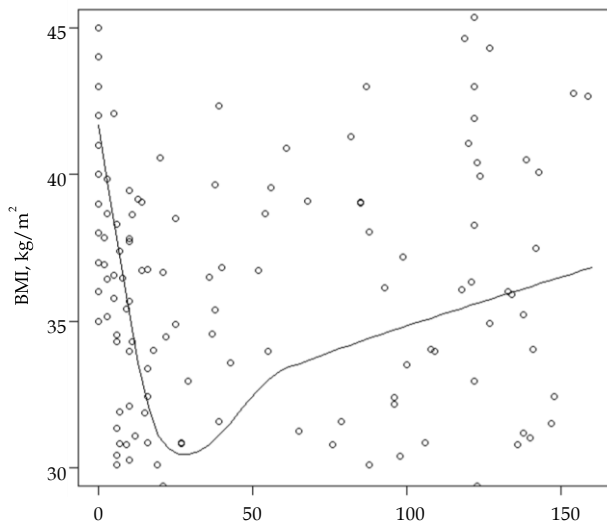


Figure 3: Schematic BMI evolution during the 10-year survey. Solid line represents mean BMI

DISCUSSION:

Our discoveries were steady with those acquired in different examinations depicting a long haul study after AGB. Yet, our investigation has a few restrictions, including its review type, information from a similar gathering of patients were looked at changed timeframes, technique for data accumulation

and low number of patients. The last factor is clarified by the generally late presentation of this system and our longing to inspect the consequences of this medical procedure following 10 years of overview. The other method to improve our outcomes is through a superior choice of patients for this particular strategy. Other authors [6,18] assumed that patients with an underlying IMC < 50 and age < 40 are better possibility for AGB. Our examination couldn't recognize any factor that had the option to foresee achievement or disappointment. This finding might be because of the low examination control. The mean postponement of maximal EWL in our examination was 22 ± 21 months. Extrapolating this to our populace, we propose an option careful strategy for non-responders, i.e., with a EWL under 25% at 43 months after gastric banding. At 10 years, the mean EWL is 32% in our investigation, while different examinations showed better outcomes at long haul with a mean EWL from 40 to 50% [10-12]. The underlying weight reduction (48% in our investigation) was practically identical to other studies [13]), as its ensuing climb is well known [14-15]. High re-intercession rate can be clarified somewhat by the "perigastric" situating strategy which was utilized at first and was thusly supplanted by "standards flaccida" procedure. Our re-intercession rate of 58% was likewise tantamount to the rate of 50-60 % saw in other long haul studies [16-17], and the level of band evacuation (35%) was practically identical to the 7-51% saw in past studies [17-18].

CONCLUSION:

Better choice criteria and a quick strategy change (revisonal strategies) in instances of inadequate weight reduction could improve the presentation of this method. The upsides of this negligibly obtrusive strategy are straightforwardness, movability, reversibility and great transient outcomes. At 10 years, only one-fifth of patients in our accomplice had great outcome in wording EWL. In 33% of cases, the AGB was evacuated, and in 66% of patients, we played out a re-task. The real downsides are needed for severe postoperative development and diet and nearness of embed with potential for embed related issues later on just as less positive outcomes in correlation with other surgeries.

REFERENCES:

1. HAS. Obésité: prise en charge chirurgicale chez l'adulte. Recommandation de bonne pratique; 2009.[availablefrom:http://www.has-sante.fr/portail/jcms/c_765529/fr/obesite-prise-

- en-chargechirurgicale-chez-l-adulte?xtmc=&xtcr=26]
2. Brown J, Boyle M, Mahawar K, Balupuri S, Small PK. Laparoscopic adjustable gastric band survival in a high-volume bariatric unit. *Br J Surg*. 2013 Nov; **100**(12): 1614-8 Malisev E. Ten-year weight loss after gastric banding.
 3. Victorzon M, Tolonen P. Mean fourteen-year, 100% follow-up of laparoscopic adjustable gastric banding for morbid obesity. *Surg Obes Relat Dis*. 2013 Sep-Oct; **9**(5): 753-757.
 4. Kruger R, Pricolo V, Streeter T, Colacchio D, Andrade U. A Bariatric Surgery Center of Excellence: Operative Trends and Long-Term Outcomes. *Am Coll Surg*. 2014 Mar 12. pii: S1072-515(14)00195-1
 5. Reinhold R. Critical analysis of long term weight loss following gastric bypass. *Surg Gynecol Obstet*. 1982 Sep; **155**(3): 385-94
 6. Di Lorenzo N, Furbetta F, Favretti F, Segato G, De Luca M, Micheletto G, Zappa M, De Meis P, Lattuada E, Paganelli M, Lucchese M, Basso N, Capizzi FD, Di Cosmo L, Mancuso V, Civitelli S, Gardinazzi A, Giardiello C, Veneziani A, Boni M, Borrelli V, Schettino A, Forestieri P, Pilone V, Camperchioli I, Lorenzo M. Laparoscopic adjustable gastric banding via pars flaccida versus perigastric positioning: technique, complications, and results in 2,549 patients. *Surg Endosc*. 2010 Jul; **24**(7): 1519-1523
 7. Alhamdani A, Wilson M, Jones T, Taqvi L, Gonsalves P, Boyle M, Mahawar K, Balupuri S, Small PK. Obes Laparoscopic adjustable gastric banding: a 10-year single-centre experience of 575 cases with weight loss following surgery. *Surg*. 2012 Jul; **22**(7): 1029-1038
 8. Ayloo S, Fernandes E, Masrur M, Giulianotti PC. Adjustable gastric banding: a comparison of models. *Surg Obes Relat Dis*. 2013 Sep 20. pii: S1550-7289(13)00298-0.
 9. Cunneen S, Phillips E, Fielding G, Banel D, Estok R, Fahrback K, Sledge I. Studies of Swedish adjustable gastric band and LapBand: systematic review and meta-analysis. *Surg Obes Relat Dis*. 2008 Mar-Apr; **4**(2): 174-185
 10. Sjöström L1, Narbro K, Sjöström CD, Karason K, Larsson B, Wedel H, Lystig T, Sullivan M, Bouchard C, Carlsson B, Bengtsson C, Dahlgren S, Gummesson A, Jacobson P, Karlsson J, Lindroos AK, Lönroth H, Näslund I, Olbers T, Stenlöf K, Torgerson J, Agren G, Carlsson LM; Swedish Obese Subjects Study. Effects of bariatric surgery on mortality in Swedish obese subjects. *N Engl J Med*. 2007 Aug 23; **357**(8): 741-752
 11. O'Brien P, McPhail T, Chaston TB, Dixon JB. Systematic review of medium-term weight loss after bariatric operations. *Obes Surg* 2006; **16**: 1032-1040
 12. Mittermair R, Obermüller S, Perathoner A, Sieb M, Aigner F, Margreiter R. Results and complications after Swedish adjustable gastric banding-10 years experience. *Obes Surg*. 2009 Dec; **19**(12): 1636-1641
 13. Himpens J, Cadière G, Bazi M, Vouche M, Cadière B, Dapri G. Long-term outcomes of laparoscopic adjustable gastric banding. *Arch Surg*. 2011 Jul; **146**(7): 802-807
 14. Jean-Marc Chevallier. Prévention de l'insuffisance de perte de poids après anneau gastrique. [available from:<http://www.chirurgie-viscerale.org/Data/upload/files/Mise%20au%20point/ FCC5%20mise%20en%20page.pdf>]
 15. Obepi. ObÉpi-Roche 2012. Enquête épidémiologique nationale sur le surpoids et l'obésité; 2012 [available from:http://www.roche.fr/home/recherche/domaines_therapeutiques/cardio_metabolisme/enquete_nationale_obepi_2012.html]
 16. Caiazzo R, Pattou F. Gastric banding, sleeve gastrectomy or gastric bypass. Is evidence-based medicine able to help us making our choice? *J Visc Surg* 2013; **150**(2): 104-115. Doi: 10.1016/j.jviscsurg.2013.03.011
 17. Sjöström L, Lindroos AK, Peltonen M, Torgerson J, Bouchard C, Carlsson B, Dahlgren S, Larsson B, Narbro K, Sjöström CD, Sullivan M, Wedel H. Swedish Obese Subjects Study Scientific Group. Lifestyle, diabetes, and cardiovascular risk factors 10 years after bariatric surgery. *N Engl J Med* 2004; **351**(2): 2683-2693
 18. Kuzmak L, Yap I, McGuire L, Dixon J, Young M. Surgery for morbid obesity. Using an inflatable gastric band. *AORN J* 1990 Jun; **51**(6): 1573.